

# Toast

The <ava-toast> system provides a comprehensive notification solution with multiple variants, flexible positioning, smooth animations, and action buttons. Built around a service-based architecture, it offers both simple and advanced toast configurations for various user feedback scenarios.

## How to use

### Basic Usage

Simple toast notifications with default configurations.

```
import { AavaToastService } from "@aava/play-core";

// Inject the service
constructor(private toastService: AavaToastService) {}

// Show different types of toasts
this.toastService.success({ message: 'Operation completed!' });
this.toastService.error({ message: 'Something went wrong!' });
```

### Variants

Six distinct toast variants for different notification types and user feedback scenarios.

```
&lt;aava-button
  label="Show Success Toast"
  variant="success"
  (userClick)="showSuccessToast()"
&gt;&lt;/aava-button&gt;
```

### Available Variants

- Success - Green styling for successful operations and confirmations
- Error - Red styling for errors and critical issues
- Warning - Orange/yellow styling for warnings and cautions
- Info - Blue styling for informational messages and tips
- Default - Neutral styling for general notifications
- Custom - Fully customizable styling and content

### Sizes

Three size variants to accommodate different content lengths and interface requirements.

```
// Inject the toast service in your component
constructor(private toastService: ToastService) {}

// Show different types of toasts
showSuccessToast() {
  this.toastService.success({
    title: 'Successfully created!',
    message: 'Your changes have been saved successfully',
    duration: 2000,
    customWidth: '400px',
    design: 'modern',
    size: 'large',
  });
}
```

## Available Sizes

- Small - Compact size for minimal content and dense interfaces
- Medium - Standard size for most notification scenarios (default)
- Large - Prominent size for important messages and detailed content

## Service Methods

The ToastService provides convenient methods for different toast types:

### Success Toast

### Error Toast

### Warning Toast

### Info Toast

### Custom Toast

### API Reference

## ToastService Methods

Method	Parameters	Return Type	Description
success()	SuccessToastConfig?	Promise<ToastResult>	Show success toast with green styling
error()	ErrorToastConfig?	Promise<ToastResult>	Show error toast with red styling
warning()	WarningToastConfig?	Promise<ToastResult>	Show warning toast with orange styling
info()	InfoToastConfig?	Promise<ToastResult>	Show info toast with blue styling
default()	DefaultToastConfig?	Promise<ToastResult>	Show default toast with neutral styling
custom()	CustomToastConfig?	Promise<ToastResult>	Show custom toast with full customization
setPosition()	ToastPosition	void	Set global toast position
dismissAll()	-	void	Dismiss all active toasts

## Toast Configuration Interfaces

### Base ToastConfig

Property	Type	Default	Description
title	string?	"	Toast header text
message	string?	"	Toast body text
duration	number?	4000	Auto-dismiss duration in milliseconds
position	ToastPosition?	'top-right'	Toast position on screen

Property	Type	Default	Description
showCloseButton	boolean?	true	Whether to show close button
showProgress	boolean?	true	Whether to show progress bar
icon	string?	"	Custom icon name
iconColor	string?	"	Custom icon color
customWidth	string?	"	Custom toast width
customHeight	string?	"	Custom toast height
design	'classic'   'modern'	'classic'	Toast design variant
size	'large'   'medium'   'small'	'large'	Toast size variant

## SuccessToastConfig

Property	Type	Default	Description
type	'success'	'success'	Toast type (always 'success')

## ErrorToastConfig

Property	Type	Default	Description
type	'error'	'error'	Toast type (always 'error')
showRetryButton	boolean?	false	Whether to show retry button
retryButtonText	string?	'Retry'	Text for retry button

## WarningToastConfig

Property	Type	Default	Description
type	'warning'	'warning'	Toast type (always 'warning')
showActionButton	boolean?	false	Whether to show action button
actionButtonText	string?	'Action'	Text for action button

## InfoToastConfig

Property	Type	Default	Description
type	'info'	'info'	Toast type (always 'info')
showLearnMoreButton	boolean?	false	Whether to show learn more button
learnMoreButtonText	string?	'Learn More'	Text for learn more button

## CustomToastConfig

Property	Type	Default	Description
type	'custom'	'custom'	Toast type (always 'custom')
customContent	string?	"	Custom HTML content
customBackground	string?	"	Custom background color
customTextColor	string?	"	Custom text color
progressColor	string?	"	Custom progress bar color

Property	Type	Default	Description
showCustomActions	boolean?	false	Whether to show custom action buttons
customActions	CustomAction[]?	"	Array of custom action buttons

## Toast Position Options

Position	Description
'top-left'	Top-left corner of the screen
'top-center'	Top-center of the screen
'top-right'	Top-right corner of the screen (default)
bottom-left	Bottom-left corner of the screen
bottom-center	Bottom-center of the screen
bottom-right	Bottom-right corner of the screen

## Toast Result Interface

Property	Type	Description
action	'close'   'retry'   'action'   'learn-more'   'timeout'   string	Action that triggered toast dismissal
data	any?	Additional data from custom actions

## Custom Action Interface

Property	Type	Description
action	string	Unique identifier for the action

Property	Type	Description
label	string	Display text for the action button
data	any?	Additional data to pass with the action

## Best Practices

### Design Guidelines

- Choose appropriate variants - Use semantic colors that match the message type
- Keep messages concise - Toast notifications should be brief and actionable
- Use consistent positioning - Stick to one position for your application
- Consider duration carefully - Longer durations for important messages, shorter for confirmations
- Limit concurrent toasts - Avoid overwhelming users with too many notifications

### Accessibility

- Provide meaningful titles - Use descriptive headers for screen readers
- Include action alternatives - Ensure all toast actions are keyboard accessible
- Test with screen readers - Verify proper announcement of toast content
- Maintain focus management - Ensure focus returns to appropriate elements
- Use sufficient contrast - Maintain readability in both light and dark themes

### Performance

- Limit toast instances - Avoid creating excessive toast components
- Use appropriate timeouts - Set reasonable auto-dismiss durations
- Clean up resources - Ensure proper cleanup of event listeners
- Optimize animations - Use CSS transforms for smooth performance

### User Experience

- Position strategically - Choose positions that don't block important content
- Provide clear actions - Make action buttons descriptive and intuitive
- Handle errors gracefully - Use error toasts with retry options when appropriate
- Consider mobile users - Ensure toasts are readable on small screens

- Respect user preferences - Allow users to control toast behavior

## Use Cases

- Success Confirmations - Operation completion, form submissions
- Error Notifications - Validation failures, API errors, network issues
- Warning Messages - Important reminders, confirmation requirements
- Information Updates - System status, feature announcements
- Action Prompts - User decisions, next steps, navigation hints

## Technical Notes

### Service Architecture

The toast system uses a service-based architecture where:

- ToastService manages all toast operations and lifecycle
- ToastContainerComponent provides the positioning and container logic
- Individual toast components handle specific styling and behavior
- Dynamic component creation enables programmatic toast generation

### Positioning System

Toasts are positioned using CSS transforms and positioning:

- Fixed positioning ensures toasts appear above all content
- Responsive behavior adapts to different screen sizes
- Z-index management maintains proper layering
- Mobile optimization provides full-width toasts on small screens

### Animation System

Toast animations include:

- Entrance animations - Slide and fade in effects
- Exit animations - Slide and fade out effects
- Progress bars - Visual countdown for auto-dismiss
- Hover interactions - Timer pause/resume functionality

### Event Handling

The system handles multiple event types:

- Close events - User-initiated dismissal
- Action events - Button clicks and custom actions
- Timeout events - Auto-dismiss completion
- Hover events - Timer pause/resume functionality